BOBBY JINDAL GOVERNOR



HAROLD LEGGETT, PH.D. SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY ENVIRONMENTAL SERVICES

Certified Mail No.

Agency Interest (AI) No. 2418 Activity No. PER20080030

Mr. Chris Chandler Refinery Manager ConocoPhillips Company P.O. Box 176 Belle Chasse, LA 70037

RE: Prevention of Significant Deterioration (PSD) Permit, Alliance Refinery, ConocoPhillips Company, Belle Chasse, Plaquemines Parish, Louisiana

Dear Mr. Chandler:

Enclosed is your permit, PSD-LA-696(M-1). Construction of the proposed project is not allowed until such time as the corresponding Part 70 Operating Permit is issued.

Please be advised that pursuant to provisions of the Environmental Quality Act and the Administrative Procedure Act, the Department may initiate review of a permit during its term. However, before it takes any action to modify, suspend or revoke a permit, the Department shall, in accordance with applicable statutes and regulations, notify the permittee by mail of the facts or operational conduct that warrant the intended action and provide the permittee with the opportunity to demonstrate compliance with all lawful requirements for the retention of the effective permit.

Should you have any questions, contact Corbet Mathis of the Air Permits Division at (225) 219-3126.

Necols Public Notice

Date

CSN:CMM

c: US EPA Region VI

PUBLIC NOTICE LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ) CONOCOPHILLIPS COMPANY

ALLIANCE REFINERY; UNIT 294 - LOW SULFUR GASOLINE UNIT PROPOSED PART 70 AIR OPERATING RENEWAL/MODIFICATION AND PSD MODIFICATION PERMITS

The LDEQ, Office of Environmental Services, is accepting written comments on the Part 70 Air Operating Renewal/Modfication and PSD Modification Permits for ConocoPhillips Company, P.O. Box 176, Belle Chasse, LA 70037 for the Alliance Refinery, Unit 294 - Low Sulfur Gasoline Unit. The facility is located at 15551 Highway 23 approximately 10 miles south of Belle Chasse on the westside of the Mississippi River near Myrtle Grove, Plaquemines Parish.

ConocoPhillips' Alliance Refinery produces a wide range of petroleum products from crude oil, such as motor gasoline, jet fuel, diesel fuel, LPG, carbon black feedstock, propane, and coke. It also produces by-product elemental sulfur and petrochemicals such as benzene, toluene, and xylene. The plant is covered by Standard Industrial Classification (SIC) 2911. Unit 294, Low Sulfur Gasoline Unit, is part of the Clean Fuels Project that produces low sulfur gasoline with sulfur content less than 30 parts per million (ppm). The project was needed to come in compliance with the US EPA Tier 2 requirements. The rule mandated a reduction in sulfur content in gasoline. ConocoPhillips requested to reconcile fugitive emissions with updated emission factors and component counts, increase the maximum firing rating for the Low Sulfur Gasoline Feed Heater No. 1, Emission Point No. 294-H-1, from 120 MM BTU/hr to 138.12 MM BTU/hr, and renew the Part 70 Operating Permit. No physical modifications are being proposed with this renewal.

Pollutant	<u>Before</u>	<u>After</u>	Change
PM ₁₀	3.76	3.76	-
SO ₂	13.56	13.56	-
NO _X	20.17	20.17	-
СО	41.52	41.52	-
VOC*	34.47	60.61	+26.14
Sulfuric Acid	0.17	0.17	-

^{*}Includes a number of Toxic Air Pollutants. Benzene is being increased above the MER.

A technical review of the working draft of the proposed permit was submitted to the facility representative and the LDEQ Surveillance Division. Any remarks received during the technical review will be addressed in the "Worksheet for Technical Review of Working Draft of Proposed Permit". All remarks received by LDEQ are included in the record that is available for public review.

Written comments, written requests for a public hearing or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. Written comments and/or written requests must be received by 12:30 p.m., Monday, June 22, 2009. Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send form_7118_r01
04/30/07

notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The application, proposed Part 70 air operating permit, proposed PSD permit, and Statement of Basis are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.

Additional copies may be reviewed at the Plaquemines Parish Library, Belle Chasse Branch, 8442 Hwy 23, Belle Chasse, LA 70037.

Inquiries or requests for additional information regarding this permit action should be directed to Corbet Mathis, LDEQ, Air Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3140.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at deqmailtistrequest@la.gov or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the proposed permits and statement of basis can be viewed at the LDEQ permits public notice webpage at www.deq.louisiana.gov/apps/pubNotice/default.asp and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx.

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at http://www.doa.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm.

All correspondence should specify AI Number 2418, Permit Number 2840-V2 or PSD-LA-696(M-1), and Activity Number PER20080006 or PER20080030.

Scheduled Publication Dates: May 15, 2009 in The Advocate and May 19, 2009 in The Plaquemine Gazette

Agency Interest No. 2418

PSD-LA-696(M-1)

AUTHORIZATION TO CONSTRUCT AND OPERATE A MODIFIED MAJOR SOURCE PURSUANT TO THE PREVENTION OF SIGNIFICANT DETERIORATIONREGULATIONS IN LOUISIANA ENVIRONMENTAL REGULATORY CODE, LAC 33:III.509

In accordance with the provisions of the Louisiana Environmental Regulatory Code, LAC 33:III.509,

ConocoPhillips Company Alliance Refinery 15551 Highway 23 Belle Chasse, LA 70037

is authorized to modify and operate the Alliance Refinery near

Belle Chasse, LA Plaquemines Parish

subject to the emissions limitations, monitoring requirements, and other conditions set forth hereinafter.

Ciamadalaia	J C	, 2009
Signed this	day of	. 2009
~		

Cheryl Sonnier Nolan
Assistant Secretary
Office of Environmental Services
Louisiana Department of Environmental Quality

BRIEFING SHEET

ALLIANCE REFINERY AGENCY INTEREST NO. 2418 CONOCOPHILLIPS COMPANY BELLE CHASSE, PLAQUEMINES PARISH, LOUISIANA PSD-LA-696(M-1)

PURPOSE

ConocoPhillips requests that the existing PSD-LA-696 be modified to reconcile the PSD permit limit for Unit Fugitives, Emission Point No. 294-FF, with as-built fugitive component counts and updated emission factors. Also, the Low Sulfur Gasoline Reboiler No. 1, Low Sulfur Gas Tank No. 1, Low Sulfur Gas Tank No. 2, and Low Sulfur Gas Tank No. 3 are being removed from the PSD permit since these emission points were not constructed.

As part of the Clean Fuels Project authorized by PSD-LA-696 issued October 3, 2003, ConocoPhillips constructed a charge heater and piping and fugitive components associated with the construction of the new equipment. ConocoPhillips increased steam production from the existing boilers, increased the existing cooling tower circulation rate, increased sulfur production at the Sulfur Recovery Units, and increased the wastewater throughput at the Wastewater Treatment Unit. The Clean Fuels Project was constructed by ConocoPhillips in order to comply with the Tier 2 Motor Vehicle Emission Standards and Gasoline Sulfur Control Requirements promulgated by the United States Environmental Protection Agency.

RECOMMENDATION

Approval of the proposed construction and issuance of a permit.

REVIEWING AGENCY

Louisiana Department of Environmental Quality, Office of Environmental Services, Air Permits Division.

PROJECT DESCRIPTION

As authorized by PSD-LA-696, the Clean Fuels Project was required to produce low sulfur gasoline with sulfur content less than 30 parts per million (ppm). This project was undertaken to come in compliance with the recent promulgated final rule titled "Control of Air Pollution from New Motor Vehicles: Tier 2 Motor Vehicle Emission Standards and Gasoline Sulfur Control Requirements" (Tier 2 Rule). This rule mandates a reduction in sulfur content in gasoline.

Full range Fluid Catalytic Cracking Unit gasoline is treated to reduce the sulfur content through the installation of additional hydrotreating equipment consisting of reactors, a heater, a compressor, an amine contactor, and a gasoline stabilizer.

Under this modification, PSD-LA-696(M-1), ConocoPhillips Company is proposing to reconcile the PSD permit limit for Unit Fugitives, Emission Point No. 294-FF, with as-built fugitive component counts and updated emission factors. Also, the Low Sulfur Gasoline Reboiler No. 1, Low Sulfur Gas Tank No. 1, Low Sulfur Gas Tank No. 2, and Low Sulfur Gas Tank No. 3 are being removed from the PSD permit since these emission points were not constructed.

BRIEFING SHEET

ALLIANCE REFINERY AGENCY INTEREST NO. 2418 CONOCOPHILLIPS COMPANY BELLE CHASSE, PLAQUEMINES PARISH, LOUISIANA PSD-LA-696(M-1)

Estimated emissions, in tons per year, are as follows:

<u>Pollutant</u>	Original Project Increase	Net Emissions Increase (As Built)	PSD de minimis	Review required?
PM/PM ₁₀	14.32	11.35	25/15	No
SO_2	46.84	36.15	40	No
NO _x	86.29	70.40	40	Yes
co	75.43	42.70	100	No
VOC	77.81	90.36	40	Yes
H₂S	0.75	0.75	10	No
H ₂ SO ₄	0.57	0.44	7	No

The increase in NO_X and VOC emissions are above the PSD significance levels and must undergo PSD review. Netting analysis indicated that the facility would not net out for NO_X and VOC emissions. The selection of best available control technology for NO_X and VOC emissions was based on using "top-down" approach, and included consideration of control of toxic air pollutants.

Since the LSG Reboiler No. 2 was not constructed, SO₂ increases fell below the PSD de minimis level so PSD review for SO₂ is not required.

TYPE OF REVIEW

NO_X and VOC emissions from the proposed project are above PSD significance levels. Therefore, the requested permit was reviewed in accordance with PSD regulations for these pollutants.

BEST AVAILABLE CONTROL TECHNOLOGY

The selection of best available control technology for NO_X and VOC emissions was based on using a "top-down" approach, and included consideration of control of toxic air pollutants.

Best available control technology (BACT) analysis is required for the emission units that are physically modified or are new and emit pollutants that require PSD review. In this case, BACT is required for the feed heater, Emission Point 294-H-1 and fugitive emissions, Emission Point 294-FF. Other affected emission sources are not being physically modified; therefore, BACT analysis is not required.

As permitted in PSD-LA-696, Ultra Low NO_X burners were determined as BACT for NO_X emissions. Compliance with the leak detection and repair (LDAR) program as per the requirements of LA MACT for Refineries was determined as BACT for VOC emissions from fugitive components.

BRIEFING SHEET

ALLIANCE REFINERY AGENCY INTEREST NO. 2418 CONOCOPHILLIPS COMPANY BELLE CHASSE, PLAQUEMINES PARISH, LOUISIANA PSD-LA-696(M-1)

AIR QUALITY IMPACT ANALYSIS

Prevention of Significant Deterioration (PSD) regulations require an analysis of existing air quality for those pollutants emitted in significant amounts from a proposed modification or new facility. The Clean Fuels (CF) Project complies with Federal PSD requirements for Nitrogen Dioxides (NO₂) and Volatile Organic Compounds (VOC). The National Ambient Air Quality Standards (NAAQS) and PSD Increment models demonstrated that facility-wide emissions of NO_x, including off-site sources and background data, is below the NAAQS and PSD Increment standards. The Louisiana Department of Environmental Quality (LDEQ) approved existing ambient monitors as a surrogate to additional monitoring for ozone; therefore, the CF Project does not require any additional pre-construction or post-construction monitoring. To quantify the VOC ambient impact (ozone formation) of the proposed project, the Alliance Refinery performed a Scheffe screening analysis for ozone that predicted compliance with ozone ambient standards.

ADDITIONAL IMPACTS

The CF Project complies with PSD requirements. The proposed project will not lead to a significant growth increase in Plaquemines Parish. The proposed project will not impair visibility, soils, or vegetation in Plaquemines Parish. The Federal Land Manager (FLM) stated that the CF Project does not require any Class I area analyses (deposition, ozone, or visibility). It is estimated that 2 permanent jobs will be created.

PROCESSING TIME

Application Dated:
Application Received:

March 27, 2008 April 3, 2008

Additional Information Dated:

December 12, 2008 and April 14, 2009

Effective Completeness Date:

April 16, 2009

PUBLIC NOTICE

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on XXXXXXX, and in *The Plaquemines Gazette*, Belle Chasse, on XXXXXXX, and submitted to the Plaquemines Parish Library on XXXXXXXX. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on XXXXXXXX. The draft permit was also submitted to US EPA Region VI on XXXXXXX (e-mailed). All comments will be considered prior to a final permit decision.

Alliance Refinery
Agency Interest No.: 2418
ConocoPhillips Company
Belle Chasse, Plaquemines Parish, Louisiana
PSD-LA-696(M-1)
April 16, 2009

I. APPLICANT

ConocoPhillips Company Alliance Refinery P.O. Box 176 Belle Chasse, LA 70037

II. LOCATION

ConocoPhillips Company owns and operates a petroleum refinery located in Belle Chasse, Louisiana. The adjoining property to the north of the ConocoPhillips-Alliance Refinery is owned by British Petroleum (BP). Adjoining properties to the south are owned by Mississippi River Grain Elevator, MISSALCO, and Louisiana Citrus Lands, Inc. and are used for a grain elevator and alcohol plant, and pasture lands, respectively. The refinery is bounded by the Mississippi River to the east and Highway 23 to the west. Property west of Highway 23 is owned by Tosco and BP. This property is used as pasture land. Approximate UTM coordinates are 211.520 Kilometers East and 3287.014 Kilometers North, Zone 16.

III. PROJECT DESCRIPTION

PSD-LA-696, issued October 3, 2003, authorized construction of the Clean Fuels Project. The Clean Fuels Project was required to produce low sulfur gasoline with sulfur content less than 30 parts per million (ppm). This project was undertaken to come in compliance with the recent promulgated final rule titled "Control of Air Pollution from New Motor Vehicles: Tier 2 Motor Vehicle Emission Standards and Gasoline Sulfur Control Requirements" (Tier 2 Rule). This rule mandates a reduction in sulfur content in gasoline.

Full range Fluid Catalytic Cracking Unit gasoline is treated to reduce the sulfur content through the installation of additional hydrotreating equipment consisting of reactors, a heater, a compressor, an amine contactor, and a gasoline stabilizer.

For this modification, PSD-LA-696(M-1), ConocoPhillips Company is proposing to reconcile the PSD permit limit for Unit Fugitives, Emission Point No. 294-FF, with as-built fugitive component counts and updated emission factors. Also, the Low Sulfur Gasoline Reboiler No. 1, Low Sulfur Gas Tank No. 1, Low Sulfur Gas Tank No. 2, and Low Sulfur Gas Tank No. 3 are being removed from the PSD permit since these emission points were not constructed.

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Estimated emission increases from the Clean Fuels Project in tons per year are as follows:

Pollutant	Original Project Increase	Net Emissions Increase (As Built)	PSD de minimis	Review required?
PM/ PM ₁₀	14.32	11.35	25/15	No
SO ₂	46.84	36.15	40	No
NO_X	86.29	70.40	40	Yes
CO	75.43	42.70	100	No
VOC	77.81	90.36	40	Yes
H_2S	0.75	0.75	10	No
H ₂ SO ₄	0.57	0.44	7	No

The increase in NO_X and VOC emissions are above the PSD significance levels and must undergo PSD review. Netting analysis indicated that the facility would not net out for NO_X and VOC emissions. The selection of best available control technology for NO_X and VOC emissions was based on using "top-down" approach, and included consideration of control of toxic air pollutants.

Since the LSG Reboiler No. 2 was not constructed, SO₂ increases fell below the PSD de minimis level so PSD review for SO₂ is not required.

IV. SOURCE IMPACT ANALYSIS

A proposed net increase in the emission rate of a regulated pollutant above de minimis levels for new major or modified major stationary sources requires review under Prevention of Significant Deterioration regulations, 40 CFR 52.21. PSD review entails the following analyses:

- A. A determination of the Best Available Control Technology (BACT);
- B. An analysis of the existing air quality and a determination of whether or not preconstruction or postconstruction monitoring will be required;
- C. An analysis of the source's impact on total air quality to ensure compliance with the National Ambient Air Quality Standards (NAAQS);
- D. An analysis of the PSD increment consumption;
- E. An analysis of the source related growth impacts;
- F. An analysis of source related growth impacts on soils, vegetation, and visibility;
- G. A Class I Area impact analysis; and

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H. An analysis of the impact of toxic compound emissions.

A. BEST AVAILABLE CONTROL TECHNOLOGY

Under current PSD regulations, an analysis of "top down" BACT is required for the control of each regulated pollutant emitted from a modified major stationary in excess of the specified significant emission rates. The top down approach to the BACT process involves determining the most stringent control technique available for a similar or identical source. If it can be shown that this level of control is infeasible based on technical, environmental, energy, and/or cost considerations, then it is rejected and the next most stringent level of control is determined and similarly evaluated. This process continues until a control level is arrived at which cannot be eliminated for any technical, environmental, or economic reason. A technically feasible control strategy is one that has been demonstrated to function efficiently on identical or similar processes. Additionally, BACT shall not result in emissions of any pollutant which would exceed any applicable standard under 40 CFR Parts 60 and 61.

NO_x and VOC emissions from this project will be above PSD significance levels. A BACT analysis is required for PSD regulated pollutants emitted in significant amounts from the project.

BACT analyses for NOx

As permitted in PSD-LA-696, BACT for NO_x emissions from the proposed process heaters is the use of ULNBs with internal Flue Gas Recirculation. These burners will provide a 0.04 lb NO_x/MM BTU (HHV) BACT NO_x limit.

BACT analyses for **VOC**

As permitted in PSD-LA-696, BACT for VOC emissions from the heater is proposed as good combustion practices and good engineering design.

The Alliance Refinery LDAR program, which meets or exceeds Louisiana Refinery Maximum Achievable Control Technology (MACT), will serve as BACT to minimize emissions of VOC from the new fugitive components.

B. ANALYSIS OF EXISTING AIR QUALITY

PSD Regulations require an analysis of existing air quality for those pollutant emissions which increase significantly from a proposed major source. NO_x and VOC are pollutants of concern in this case. The Clean Fuels (CF) Project complies with Federal PSD requirements for Nitrogen Dioxides (NO₂) and Volatile Organic Compounds (VOC). The National Ambient Air Quality Standards (NAAQS) and PSD Increment models demonstrated that facility-wide emissions of NO_x,

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including off-site sources and background data, are below the NAAQS and PSD Increment standards. The Louisiana Department of Environmental Quality (LDEQ) approved existing ambient monitors as a surrogate to additional monitoring for ozone; therefore, the CF Project does not require any additional pre-construction or post-construction monitoring. To quantify the VOC ambient impact (ozone formation) of the proposed project, the Alliance Refinery performed a Scheffe screening analysis for ozone that predicted compliance with ozone ambient standards.

C. NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) ANALYSIS

NAAQS analysis was performed and compliance with NO_x was predicted. A Scheffe Screening analysis was also performed and showed compliance with the ozone impact from the project.

D. PSD INCREMENT ANALYSIS

Increment analysis predicted compliance for NO_x standards (please note that no PSD Increment standard exists for ozone).

E. SOURCE RELATED GROWTH IMPACTS

The proposed project will not lead to a significant growth increase in Plaquemines Parish.

F. SOILS, VEGETATION, AND VISIBILITY IMPACTS

The proposed project will not impair visibility, soils, or vegetation in Plaquemines Parish.

G. CLASS I AREA IMPACTS

The Federal Land Manager (FLM) stated that the CF Project does not require any Class I area analyses (deposition, ozone, or visibility).

H. TOXIC EMISSIONS IMPACT

The CF project increased potential LTAP emissions greater than the minimum emission rate (MER) for both Benzene and Sulfuric Acid. Refined modeling analysis for Benzene indicated that there is no impact on Ambient Air Standards (AAS) for Benzene. Previous modeling analysis for sulfuric acid indicated that there would not be any impact on the AAS for sulfuric acid due to the present project increase in sulfuric acid emissions.

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V. CONCLUSION

The Office of Environmental Services, Permits Division, has made a preliminary determination to approve the proposed reconciliation for ConocoPhillips, Belle Chasse, Plaquemines Parish, Louisiana, subject to the attached specific and general conditions. In the event of a discrepancy in the provisions found in the application and those in this Preliminary Determination Summary, the Preliminary Determination Summary shall prevail.

SPECIFIC CONDITIONS

Alliance Refinery Agency Interest No.: 2418 ConocoPhillips Company Belle Chasse, Plaquemines Parish, Louisiana PSD-LA-696(M-1)

1. The permittee is authorized to operate in conformity with the specifications submitted to the Louisiana Department of Environmental Quality (LDEQ) as analyzed in LDEQ's document entitled Preliminary Determination Summary dated May 28, 2003, and subject to the following emission limitations and other specific conditions. Specifications submitted are contained in the application and Emission Inventory Questionnaire (EIQ) dated February 3, 2003, as well as additional information dated February 5, 2003.

	MAXIMUM	ALLOWABLE E	MISSIONS RATES	
Emission Point No.	Description		NO _x	VOC
294-H-1	Low Sulfur	Lb/hr	5.52	0.74
	Gasoline Feed	TPY	20.17	2.72
	Heater No. 1	lb/MM BTU	0.04	-
294-FF	Unit Fugitives	Lb/hr	-	13.22
		TPY	-	57.89
301-B-3	Supplemental	Lb/hr	43.00	9.03
	Boiler	TPY	188.34	39.55
301-R-1	Cooling Water	Lb/hr	-	8.21
	Tower No. 1	TPY	-	35.96
308-W	Wastewater	Lb/hr	2.41	16.17
·	Treatment Unit	TPY	8.45	33.58
591-D-21-X	Sulfur Recovery	Lb/hr	4.20	0.23
	Incinerator	TPY	15.33	0.84

- 2. The Feed Heater No. 1, Emission Point No. 294-H-1, shall comply with all the applicable provisions of NSPS, 40 CFR 60 Subpart J Standards of Performance for Petroleum Refineries.
- 3. Permittee shall comply with all the applicable provisions of Louisiana MACT Determination for Refineries of July 26, 1994 as BACT for Unit Fugitives, Emission Point 294-FF.
- 4. Permittee shall comply with the Louisiana General Conditions as set forth in LAC 33:III.537.

TABLE I BACT COST SUMMARY FOR NOx, VOC, AND SO2

ALLIANCE REFINERY CONOCOPHILLIPS COMPANY AGENCY INTEREST NO. 2418 BELLE CHASSE, PLAQUEMINES PARISH, LOUISIANA PSD-LA-696(M-1)

Control Alternatives	tematives	Availability / Feasibility	Negative Impacts (a)	Control Efficiency (% or	Emissions Removed (tpy)	Annualized Cost (\$)	Average Cost Effectiveness (\$/Ton)	Increment Effectiveness (\$/Ton)
Fugitives for Low Sulfur Gasoline Unit EPN 294-FF								
VOC Emissions			" "					
	LDAR – LA MACT for Refineries	Yes/Yes	None		-	-	:	1
Note:	a) Negative impacts: 1) economic, 2) environmental, 3) energy, 4) safety	icts: 1) econor	nic, 2) env	ironmental,				

TABLE I BACT COST SUMMARY FOR NOx, VOC, AND SO,

ALLIANCE REFINERY CONOCOPHILLIPS COMPANY AGENCY INTEREST NO. 2418 BELLE CHASSE, PLAQUEMINES PARISH, LOUISIANA PSD-LA-696(M-1)

1		An.ilahilih.	Magaine	londro	Denionion	A marializad Core	A stempto	Increment
	ter right ves	Feasibility	Impacts (a)	Impacts (a) Efficiency (%	Removed (tpy)	(\$)	Effectiveness	Effectiveness
				or ppmv)			(\$/Ton)	(\$/Ton)
Low Sulfur Gasoline Feed Heater #1 EPN 294-H-1								
NO _x Emissions								
	SCONO,	Yes/No	_	2-3 ppmv		1		;
	SCR	Yes/No	1,2	. %08	16.1	\$368,870	\$22,860	:
	SNCR	Yes/No		20%	1	ŀ	i	:
	ULNBs	Yes/Yes	None	0.04 lb/MM RTI	-	1	•	1
VOC Emissions								
	Good Combustion Practices	Yes/Yes	None	1	1	I	1	1
	Good Engineering Design	Yes/Yes	None	:	:	1	1	:
Note:	a) Negative impacts: 1) economic, 2) environmental, 3) energy,4) safety	1) economic, 2) environmen	tal, 3) energy,				

TABLE I BACT COST SUMMARY FOR NOx, VOC, AND SO₂

ALLIANCE REFINERY CONOCOPHILLIPS COMPANY AGENCY INTEREST NO. 2418 BELLE CHASSE, PLAQUEMINES PARISH, LOUISIANA PSD-LA-696(M-1)

Control Alternatives	tematives	Availability / Feasibility	Negative Impacts (a)	Negative Control mpacts (a) Efficiency (% or ppmv)	Negative Control Emissions Impacts (a) Efficiency (% Removed (tpy) or ppmv)	Annualized Cost (\$)	Average Cost Effectiveness (\$/Ton)	Increment Effectiveness (\$/Ton)
Low Sulfur Gasoline CAP Tanks #1 EPN 294-T-1,2,3								
VOC Emissions								
	External Floating Roof	Yes/Yes	None		••	-	-	-
Note:	a) Negative impacts: 1) economic,4) safety	1) economic, 2) environmer	2) environmental, 3) energy,				

TABLE II: AIR QUALITY ANALYSIS SUMMARY

Alliance Refinery
Agency Interest No.: 2418
ConocoPhillips Company
Belle Chasse, Plaqumines Parish, Louisiana
PSD-LA-696(M-1)

Pollutant	Averaging	Preliminary	Significant	Current	Level of	Maximum	NAAQS	Modeled PSD	Modeled PSD Allowable Class
	Period	Screening	Monitoring	Monitoring	Significant	modeled	(ug/m3)	Increment	II PSD
		Concentration	Concentration	Concentration	Impact (ug/m3)	Impact (ug/m3) Concentration		Consumption	Increment
		(ug/m3)	(ug/m3)	(ug/m3)		(ug/m3)		(ug/m3)	(ug/m3)
NOx	Annual	2.91	14	NR	1	20.56	100	11.52	25

NR = Not required